CLAIMS

1. A method for synchronizing measurements in a mobile communication apparatus having a first active radio access means (100) adapted to communicate according to a first radio access technology and a second passive radio access means (200) adapted to communicate according to a second radio access technology, **characterized** by:

generating a time reference common to the first and the second access means (100, 200);

obtaining at least one time schedule, said schedule indicating a time gap during which the second access means (200) is allowed to be active; and

determining an activation time of the time schedule based on the common time reference.

2. The method according to claim 1, wherein, when activation of the time schedule is requested, said request initiates a common time event (CTE), in response to which the time reference is generated in the first and the second access means (100, 200).

3. The method according to claim 2, wherein the CTE is a hardware supported interrupt.

4. The method according to claim 2 or 3, wherein counter values of first and second counters (158, 258) provided in the first and the second access means (100, 200), respectively, are registered in response to the CTE.

5. The method according to claim 4, wherein the current connection frame number, current slot, and current chip are registered by the first access means (100) in response to the CTE.

6. The method according to claim 4 or 5, wherein the current frame number in a GSM multiframe structure, and the position within said frame is registered by the second access means (200) in response to the CTE.

7. The method according to any of the previous claims, wherein the time schedule is obtained based on information received from a first communication network (17) to which the first access means (100) is connected.

8. The method according to claim 7, wherein the received information comprises configuration data specifying gaps, in which the second access means (200) is allowed to be active.

9. The method according to claim 7, wherein the received information comprises setup or reconfiguration information, and the first access means (100) obtains the gaps based on stored and received data.

10. The method according to any of the previous claims, wherein the duration of said gap, and the distance between the common time reference and said gap, are given in the time schedule.

11. The method according to any of the previous claims, wherein several time gaps are determined in the time schedule, and the distance between said gaps is specified in the schedule.

12. The method according to claim 4, wherein a delay between channel timing and the counter (158) of the first access means (100) is taken into account when determining the activation time of the time schedule.

13. The method according to any of the previous claims, wherein the time schedule, which is obtained by the first access means (100), is determined in the time format of a first RAT.

14. The method according to claim 13, wherein the time schedule is translated into the time format of a second RAT by the second access means (200).

15. The method according to any of the previous claims, wherein the time schedule is utilized by the second access means (200) to provide cell measurements.

16. An arrangement for synchronizing measurements in a mobile communication apparatus, comprising

a first active radio access means (100) comprising a first transceiver means (150) for communicating with a first communication network (17), said first transceiver means being adapted to communicate according to a first radio access technology;

a second passive radio access means (200) comprising a second transceiver means (250) for communicating with a second communication network (20), said second transceiver means being adapted to communicate according to a second radio access technology;

characterized by:

a time reference generating means (155, 255) for generating a time reference common to the first and the second access means (100, 200);

a time schedule generating means (130) for obtaining at least one time schedule, said schedule indicating at least one time gap, during which the second access means (200) is allowed to be active; and

said time schedule generating means (130) being adapted to determine the activation time of the schedule based on the common time reference.

17. The arrangement according to claim 16, wherein the time reference generating means (155, 255) is adapted to generate a common time event (CTE), and to generate the time reference in response to the CTE in the first and the second access means (100, 200).

18. The arrangement according to claim 17, wherein the time reference generating means (155, 255) comprises first and second counter synchronize mechanisms (156, 157) provided in the first and second access means (100, 200), respectively, one of said mechanisms being adapted to generate an interrupt being the CTE, which the other mechanism is adapted to receive.

19. The arrangement according to claim 18, wherein either or both of the counter synchronize mechanisms (156, 157) are adapted to write a bit onto a connection to the other, said bit being said interrupt.

20. The arrangement according to any of the claims 17 to 19, wherein the time reference generating means comprises first and second counter means (158, 258), and first and second counter value register means (157, 258) provided in the first and second access means (100, 200), respectively.

21. The arrangement according to claim 20, wherein the counter (158) of the first access means (100), in operation, is adapted to generate current connection frame number, current slot, and current chip, which the time reference generating means (155, 255) is adapted to store

in the first counter value register means (158) in response to the CTE.

22. The arrangement according to claim 20, wherein the counter (258) of the second access means (200) is adapted to generate the current frame number in GSM multiframe structure, and the position within said frame, which the time reference generating means is adapted to store in the second counter value register means (258) in response to the CTE.

23. The arrangement according to any of the claims 16-22, wherein the time schedule generating means (130) is adapted to obtain the time schedule based on stored information and data received from the first network (17) during operation.

24. The arrangement according to any of the claims 16 to 23, wherein the time schedule generating means (130) is adapted to incorporate into the time schedule parameters that identify the duration of the gap, and the distance between the common time reference and the at least one gap.

25. The arrangement according to any of the claims 16 to 24, wherein the time schedule generating means (130) is adapted to incorporate into the time schedule several time gaps, and to specify the distance between said gaps in the schedule.

26. The arrangement according to any of the claims 16 to 25, wherein the time schedule generating means (130) is adapted to in operation determine the time schedule in the time format of the first access technology.

27. The arrangement according to claim 26, wherein a processor means (230) of the second access means (200) is adapted to in operation translate the time schedule into the time format of the second access technology.

28. The arrangement according to any of the claims 16 to 27, wherein the second access means (200) is adapted to provide cell measurements during the gaps given in the time schedule, and wherein the first access means (100) is adapted to be passive.

29. The arrangement according to any of the claims 16 to 28, wherein the first radio access technology is WCDMA (Wideband Code Division Multiple Access).

30. The arrangement according to any of the claims 16 to 29, wherein the second access technology is GSM (Global System for Mobile communication).

31. The arrangement according to any of the claims 16 to 30, wherein said first and second access means (100, 200) have at least one common radio resource (10, 30).

32. The arrangement according to claim 31, wherein the common radio resource is an antenna (10).

33. A computer program product directly loadable into a memory (153, 253) of a mobile terminal (1) having digital computer capabilities, comprising software code portions for performing the steps of claim 1 when said product is run by said mobile terminal (1).

34. Use of an arrangement according to any of the claims 16 to 32 in a wireless communication apparatus (1).

35. The use of the arrangement according to claim 34, wherein the apparatus is a mobile radio terminal, a mobile telephone (1), a pager or a communicator.